AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of deciding an Internet address of a device to be specified in a network connecting a plurality of devices that communicate with each other by using an Internet Protocol, the method comprising the steps of:

detecting and collecting addresses, including IP addresses, of all the other devices connected to the network by receiving and analyzing signals flowing through the network; and

selecting an IP address, which is different from the collected addresses, from among a group of applicable IP addresses.

2. (original): The method according to claim 1, further comprising the steps of:

checking whether the selected IP address matches with the IP address of any of said other devices; and

if the selected IP address matches with the IP address of any of said other devices, repeating the step of selection of the IP address until the selected IP address does not match with the IP address of any of said other devices.

3. (currently amended): A method of deciding an Internet address of an added device to be specified in a network connecting a plurality of devices that communicate with each another by using an Internet Protocol, the method comprising the steps of:

detecting addresses, including IP addresses and MAC addresses, of all the other devices connected to the network by receiving and analyzing signals flowing through the network;

selecting an IP address and a MAC address among the detected addresses to so that said added device can act pose as a posed device having the IP address and the MAC address;

sending a destination signal on the network by using the address of the posed device, and collecting addresses of other devices by acquiring responses to the destination signal; and

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selecting an IP address, which is different from the collected addresses, among a group of applicable IP addresses.

4. (original): The method according to claim 3, which comprises collecting complete address information by selecting an IP address and a MAC address other than the IP address and the MAC address of the posed device for any device that does not respond, changing the posed device until all the devices are posed, and performing the step of sending the destination signal for each of the posed devices.

5. (original): The method according to claim 3, further comprising the steps of:

checking whether the selected IP address matches with the IP address of any of said other devices; and

if the selected IP address matches with the IP address of any of said other devices, repeating the step of selection of the IP address until the selected IP address does not match with the IP address of any of said other devices.

6. (currently amended): A method of selecting an IP address <u>for an added device</u> that does not overlap with other addresses among ~~the~~ <u>an</u> effective <u>address</u> range permitted as IP address<u>es</u>, the method comprises the steps of:

detecting and collecting addresses of all ~~the~~ other devices connected <u>with the added device</u> to ~~the~~ <u>a</u> network by receiving and analyzing signals flowing through the network;

sectioning binary numerals of the collected IP address at Nth bit ($1 \leq N \leq K$, K is a predetermined natural number) from a minimum digit, and defining digits not less than the Nth bit as high rank bits and digits lower than Nth bit as low rank bits;

judging whether all of the high rank bits of the collected IP addresses are <u>the</u> same;

if all of the high rank bits are not <u>the</u> same, changing N to N+1, N-1, or to a desired number, and sectioning the binary numerals in the step of sectioning to make the judgment at the judgment step;

repeating the number changing step until all of the high rank bits become <u>the</u> same;

if all of the high rank bits are the same, adopting a value expressed by a binary number composed of the same high rank bits and low rank bits set all to 0 as an IP network address, and adopting a value expressed by a binary number composed of high rank bits set all to 1 and low rank bits set all to 0 as subnet mask; and

selecting an IP address, which is different from the IP address of any the other device connected to the network, from among a group of effective IP addresses defined by the IP network address and the subnet mask.

7. (currently amended): A method of searching and collecting all the addresses already being used in an environment where all packets flowing through a network connected by using connecting means such as switching hub and bridge cannot be observed, by a device coupled to the network and posing as another device coupled to the network by using an address of such another device, the method comprising the steps of:

selecting an address other than an already posed address to pose as that an address of a posed device;

sending a destination signal on a network to any device having an IP address that does not respond by using the IP address of the posed device, and collecting addresses of other devices by acquiring responses to the destination signal; and

repeating the selection of the an address and sending of the a destination signal until there are no addresses that is have not been posed does not exist.

8. (currently amended): A method of limiting an address range to be searched in an environment where a wide address space is used, the method comprising the steps of:

restricting addresses in the range to be searched by using a net mask that has a suitable predetermined value; and

repeating a search of the address range with use of the net mask of smaller value if all matters to be searched are detected.

9. (currently amended): A method for automatically deciding a value of an Internet address that is not overlapped in an environment where a plurality of similar IP address deciding

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devices, each having its own MAC address, are used, the method comprising at an IP address deciding device the steps of:

selecting an IP address that is intended to for use and its own MAC address;

sending an address resolution request packet using the selected IP address as that of a transmitter and as a requested address;

observing for a predetermined period of time whether or not an address resolution request packet, including the an identical IP address used as that of a transmitter and as a requested address and a MAC address different from its own MAC address, is sent;

when the address resolution request packet is not observed, then setting the IP address as its own IP address of the device to finish the operation, and when the address resolution request packet is observed, then judging whether the MAC address included in the packet is smaller than its own MAC address; and

when the MAC address is smaller than its own MAC address, then setting the IP address as its own IP address to finish the operation, and when the MAC address is not smaller than its own MAC address, then selecting another IP address that is intended to be used.

10. (currently amended): A computer readable medium for storing instructions, which when executed on a computer, causes the computer to perform a method of deciding an Internet address of a device to be specified in a network connecting a plurality of devices that communicate with each other by using an Internet Protocol, the method comprising the steps of:

detecting and collecting addresses, including IP addresses, of all the other devices connected to the network by receiving and analyzing signals flowing through the network; and

selecting an IP address, which is different from the collected addresses, from among a group of applicable IP addresses

11. (currently amended): A computer readable medium for storing instructions, which when executed on a computer, causes the computer to perform a method of deciding an Internet address of an added device to be specified in a network connecting a plurality of devices that communicate with each another by using an Internet Protocol, the method comprising the steps of:

detecting addresses, including IP addresses and MAC addresses, of all ~~the~~ other devices connected to the network by receiving and analyzing signals flowing through the network;

selecting an IP address and a MAC address among the detected addresses ~~to~~ so that said added device can act ~~pose~~ as a posed device having the IP address and the MAC address;

sending a destination signal on the network by using the address of the posed device, and collecting addresses of other devices by acquiring responses to the destination signal; and

selecting an IP address, which is different from the collected addresses, among a group of applicable IP addresses.

12.   (currently amended):   A computer readable medium for storing instructions, which when executed on a computer, causes the computer to perform a method of selecting an IP address for an added device that does not overlap with other addresses among ~~the~~ an effective address range permitted as IP address~~es~~, the method comprises the steps of:

detecting and collecting addresses of all ~~the~~ other devices connected with the added device to ~~the~~ a network by receiving and analyzing signals flowing through the network;

sectioning binary numerals of the collected IP address at Nth bit ($1 \leq N \leq K$, K is a predetermined natural number) from a minimum digit, and defining digits not less than the Nth bit as high rank bits and digits lower than Nth bit as low rank bits;

judging whether all of the high rank bits of the collected IP addresses are the same;

if all of the high rank bits are not same, changing N to N+1, N-1, or to a desired number, and sectioning the binary numerals in the step of sectioning to make the judgment at the judgment step;

repeating the number changing step until all of the high rank bits become the same;

if all of the high rank bits are the same, adopting a value expressed by a binary number composed of the same high rank bits and low rank bits set all to 0 as an IP network address, and adopting a value expressed by a binary number composed of high rank bits set all to 1 and low rank bits set all to 0 as subnet mask; and

selecting an IP address, which is different from the IP address of any ~~the~~ other device connected to the network, from among a group of effective IP addresses defined by the IP network address and the subnet mask.

13. (currently amended): A computer readable medium for storing instructions, which when executed on a computer, causes the computer to perform a method of searching and collecting all ~~the~~ addresses already being used in an environment where all packets flowing through <u>a</u> network connected by using connecting means ~~such as switching hub and bridge~~ cannot be observed, <u>by a device coupled to the network and posing as another device coupled to the network by using an address of such another device,</u> the method comprising the steps of:

selecting an address other than <u>an</u> already posed address ~~to pose~~ as an ~~that~~ address <u>of a posed device</u>;

sending a destination signal on network to any device having <u>an</u> IP address that does not respond by using the IP address of the posed device, and collecting address<u>es</u> of other devices by acquiring responses to the destination signal; and

repeating the selection of ~~the~~ <u>an</u> address and sending of ~~the~~ <u>a</u> destination signal until the<u>re</u> <u>are no</u> address<u>es</u> that ~~is~~ <u>have</u> not posed ~~does not exist~~.

14. (currently amended): A computer readable medium for storing instructions, which when executed on a computer, causes the computer to perform a method of limiting <u>an</u> address range to be searched in an environment where a wide address space is used, the method comprising the steps of:

restricting address in the range to be searched by using a net mask that has a ~~suitable~~ <u>predetermined</u> value; and

repeating search of the address range with use of the net mask of smaller value if all matters to be searched are detected.

15. (currently amended): A computer readable medium for storing instructions, which when executed on a computer, causes the computer to perform a method for automatically deciding a value of <u>an</u> Internet address that is not overlapped in an environment where a plurality

of similar IP address deciding devices, each having its own MAC address, are used, the method comprising at an IP address deciding device the steps of:

selecting an IP address that is intended ~~to~~ for use and its own MAC address;

sending an address resolution request packet using the selected IP address as that of a transmitter and as a requested address;

observing for a predetermined period of time whether or not an address resolution request packet, including ~~the~~ an identical IP address used as that of a transmitter and as a requested address and a MAC address different from its own MAC address, is sent;

when the address resolution request packet is not observed, then setting the IP address as its own IP address ~~of the device~~ to finish the operation, and when the address resolution request packet is observed, then judging whether the MAC address included in the packet is smaller than its own MAC address; and

when the MAC address is smaller than its own MAC address, then setting the IP address as its own IP address to finish the operation, and when the MAC address is not smaller than its own MAC address, then selecting another IP address that is ~~intended~~ to be used.

16. (currently amended): A device for deciding an Internet address of a device to be specified in a network connecting a plurality of devices that communicate ~~to~~ with each other by using an Internet Protocol, the device comprising:

detecting and collecting unit which detects and collects addresses, including IP addresses, of all ~~the~~ other devices connected to the network by receiving and analyzing signals flowing through the network; and

address selecting unit which selects an IP address, which is different from the collected addresses, from among a group of applicable IP addresses.

17. (original): The Internet address deciding device according to claim 16, wherein said address selecting unit checks whether the selected IP address matches with the IP address of any of said other devices, and if the selected IP address matches with the IP address of any of said other devices then repeats the selection of the IP address until the selected IP address does not match with the IP address of any of said other devices.

18. (currently amended): A computer-based apparatus operative to decide an ~~program for causing the computer to perform a method of deciding~~ Internet address of a device to be specified in a network connecting a plurality of devices that communicate with each other by using an Internet Protocol, the ~~method~~ apparatus comprising ~~the steps of~~:

a collecting unit for detecting and collecting addresses, including IP addresses, of all ~~the~~ other devices connected to the network by receiving and analyzing signals flowing through the network; and

a selecting unit for selecting an IP address, which is different from the collected addresses, from among a group of applicable IP addresses.

19. (currently amended): A computer- based apparatus operative to decide an ~~program for causing the computer to perform a method of deciding~~ Internet address of an added device to be specified in a network connecting a plurality of devices that communicate with each another by using an Internet Protocol, the ~~method~~ apparatus comprising ~~the steps of~~:

a collecting unit for detecting and collecting addresses, including IP addresses and MAC addresses, of all ~~the~~ other devices connected to the network by receiving and analyzing signals flowing through the network;

a first selecting unit for selecting an IP address and a MAC address among the detected addresses ~~to~~ so that said added device can act ~~pose~~ as a posed device having the IP address and the MAC address;

a sending unit for sending a destination signal on the network by using the address of the posed device, and collecting addresses of other devices by acquiring responses to the destination signal; and

a second selecting unit for selecting an IP address, which is different from the collected addresses, among a group of applicable IP addresses.

20. (currently amended): A computer-based apparatus operative to select ~~program for causing the computer to perform a method of selecting~~ an IP address for an added device that does not overlap with other addresses among ~~the~~ an effective address range permitted as IP addresses, the ~~method~~ apparatus comprising ~~comprises the steps of~~:

a collecting unit for detecting and collecting addresses of all the other devices connected with the added device to the a network by receiving and analyzing signals flowing through the network;

a sectioning unit for sectioning binary numerals of the collected IP address at Nth bit ($1 \leq N \leq K$, K is a predetermined natural number) from a minimum digit, and defining digits not less than the Nth bit as high rank bits and digits lower than Nth bit as low rank bits;

a judging unit for judging whether all of the high rank bits of the collected IP addresses are the same;

if all of the high rank bits are not the same, a changing unit for changing N to N+1, N-1, or to a desired number, and sectioning the binary numerals in the step of sectioning to make the judgment at the judgment step;

a repeating unit for repeating the number changing step until all of the high rank bits become the same;

if all of the high rank bits are the same, an adopting unit for adopting a value expressed by a binary number composed of the same high rank bits and low rank bits set all to 0 as an IP network address, and adopting a value expressed by a binary number composed of high rank bits set all to 1 and low rank bits set all to 0 as subnet mask; and

a selecting unit for selecting an IP address, which is different from the IP address of any the other device connected to the network, from among a group of effective IP addresses defined by the IP network address and the subnet mask.

21.   (currently amended): A computer-based apparatus operative to search and collect program for causing the computer to perform a method of searching and collecting all the addresses already being used in an environment where all packets flowing through a network connected by using connecting means such as switching hub and bridge cannot be observed, by a device coupled to the network and posing as another device coupled to the network by using an address of such another device, the method apparatus comprising the steps of:

a selecting unit for selecting an address other than an already posed address to pose as that an address of a posed device;

a sending unit for sending a destination signal on a network to any device having an IP address that does not respond by using the IP address of the posed device, and collecting addresses of other devices by acquiring responses to the destination signal; and

a repeating unit for repeating the selection of ~~the~~ an address and sending of ~~the~~ a destination signal until there are no addresses that ~~is~~ have not posed ~~does not exist~~.

22.   (currently amended): A computer-based apparatus operative to limit ~~program for causing the computer to perform a method of limiting~~ an address range to be searched in an environment where a wide address space is used, the ~~method~~ apparatus comprising ~~the steps of~~:

a restricting unit for restricting addresses in the range to be searched by using a net mask that has a ~~suitable~~ predetermined value; and

a repeating unit for repeating a search of the address range with use of the net mask of smaller value if all matters to be searched are detected.

23.   (currently amended):   A computer-based apparatus operative to automatically decide ~~program for causing the computer to perform a method for automatically deciding~~ a value of an Internet address that is not overlapped in an environment where a plurality of similar IP address deciding devices, each having its own MAC address, are used, the ~~method~~ apparatus comprising at an IP address deciding device ~~the steps of~~:

a selecting unit for selecting an IP address that is intended ~~to~~ for use and its own MAC address;

a sending unit for sending an address resolution request packet using the selected IP address as that of a transmitter and as a requested address;

an observing unit for observing for a predetermined period of time whether or not an address resolution request packet, including ~~the~~ an identical IP address used as that of a transmitter and as a requested address and a MAC address different from its own MAC address, is sent;

when the address resolution request packet is not observed, then a setting unit for setting the IP address as its own IP address ~~of the device~~ to finish the operation, and when the address

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resolution request packet is observed, then a judging unit for judging whether the MAC address included in the packet is smaller than its own MAC address; and

when the MAC address is smaller than its own MAC address, then the setting unit for setting the IP address as its own IP address to finish the operation, and when the MAC address is not smaller than its own MAC address, then the second selecting unit for selecting another IP address that is intended to be used.

REMARKS

Claims 1-23, all the claims pending in the application, stand rejected. Applicants have amended each of claims 1, 3 and 6-23. These changes are made to remedy any indefiniteness in the claims due to improper grammar or translation of terms from the original priority document. Further, Applicants note that original claims 18-23 were directed to "a computer program," which may be improper under U.S. law. Applicants have amended the claims to be directed to an "apparatus."

Claim Rejections - 35 U.S.C. § 112

Claims 1-23 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The Examiner identifies several bases for indefiniteness. This rejection is traversed for at least the following reasons.

The Examiner identifies the bases for indefiniteness in separate lettered paragraphs. Applicants' reply with regard to each of these items follows.

a)   The Examiner asserts that claims 1, 3, 6, 10-12, 16 and 18-20 lack antecedent basis for the phrase "the other devices". This has been remedied by canceling the word "the". The meaning of "all other devices." would be clear from the context of the preamble of the claim that expressly recites "a plurality of devices" and the selection of an Internet address of "a device."

b)   The Examiner states that the phrase "selecting an IP address, which is different from the collected addresses" is indefinite in claims 1, 3, 10, 11, 16, 18 and 19 because the claims do not state a step of "collecting IP addresses" prior to the step. Applicants have amended claim 1 to specifically refer to "IP addresses" where appropriate. Similar changes are proposed for claims 3, 11 and 19 with regard to the selection step.

c)   The Examiner asserts that the phrase "applicable IP addresses" in claims 1, 3, 10, 11, 16, 18 and 19 and "effective IP addresses" in claims 6, 12 and 20 are not ascertainable.

The term "applicable IP address" means an IP address to be generally usable as an IP address <u>within a network system</u>. For example, an applicable IP address is an IP address except for the network address 0.0.0.0 and the broadcast address 255.255.255.255 and so on.

The term "effective IP address" means an IP address to be usable as an IP address <u>within a subnet</u> of a network system. For example, with respect to a network address 192.168.0.0 with the subnet mask of 24 bits, an effective IP address ranges from 192.168.0.1 to 192.168.0.254.

d) The Examiner asserts that the phrase "all the addresses" in claims 7, 13 and 21 lack antecedent basis. We propose amending the phrase to simply refer to "all addresses."

e) The phrase "already posed address" in claims 7, 13 and 21 is considered vague and indefinite because the Examiner cannot ascertain its meaning. In reply, Applicants submit that this phrase clearly refers to the addresses of devices impersonated by the address search mechanism (i.e., "posed"), as explained at page 11, lines 3-9 and 20-24. These are addresses selected by the address use pattern analyzing mechanism 8, as explained with regard to the transmission of selected addresses at page 15, lines 1-5, for an impersonating device that transmits an address resolution request packet. It is a fundamental feature of the invention that a requesting device will impersonate other devices found on the network (i.e., pose as that device) in order to determine available IP addresses.

Applicants have expressly stated in the preamble that devices are "posing as another device" and "the address of such another device" are used. This amendment provides the necessary link between the preamble and body of the claim to give it life and meaning to one skilled in the art.

f) The Examiner finds that the phrase "posed device" in claims 7, 13 and 21 lacks clear antecedent basis. The claims have been amended to remove this basis for rejection.

g) The Examiner finds the meaning of the phrase "suitable value" in claims 8, 14 and 22 to be vague and indefinite because they are not clearly ascertainable. Applicants have amended the claims to use the word "predetermined."

h)   The Examiner finds phrase "its own" in claims 9, 15 and 22 to be objectionable and recommends that they not be used. Applicants have amended the claims accordingly.

i)   Finally, the Examiner finds that the phrase "the device to finish" in claim 9, line 17 and claim 23, line 18 lacks clear antecedent basis. Applicants have amended the claim to remove this basis for rejection.

Applicants have endeavored to make other changes to the claims so that they comply with conventional grammatical rules that are common in practice before the USPTO. The Examiner is invited to advise whether there are any objections to them and to suggest alternative language that may be better, if appropriate..

Claim Rejections - 35 U.S.C. § 103

Claims 1-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Arndt et al (5,724,510). This rejection is traversed for at least the following reasons.

As a preliminary matter, Applicants note that they have directed their comments below separately to those claims that share a common terminology or content.

Claims 1, 10, 16 and 18 all concern the selection of an Internet address for a device that is to be specified in a network connecting a plurality of devices that communicate with each other by using an Internet protocol (IP). The process for undertaking such decision, based upon address resolution techniques, is explained in the application beginning at page 10, line 6 and continuing through page 17, in accordance with the flowcharts illustrated in Figs. 6-8.

A basic principle of this technique is for a candidate device that wishes to obtain an IP address to begin the selection process first "detecting and collecting addresses, including IP addresses, of all other devices in the network." This is done by receiving and analyzing signals flowing through the network, which are monitored by the candidate device. Ultimately, an IP address, which is different from the collected address, is selected by the candidate device. That selection is made from among the group of other IP addresses. As explained at page 17, such other IP addresses may be searched by a mechanism that uses principles defined at pages 17 and

18, based upon an inspection of addresses, for example, in accordance with the protocol illustrated in Fig. 8.

Arndt et al

The Examiner cites Arndt et al because of its teaching of a LAN test instrument that provides a method of choosing an IP address for itself without disrupting the ARP caches of devices connected to the LAN. The purpose of this device is to detect duplicate internet protocol addressees.

The technique applied by Arndt et al involves the broadcasting of IP addresses so that responses may be obtained from nodes on the network and stored in a database of IP addresses. The various IP addresses in the responses to the broadcast messages are collected. The addresses are then dynamically compared with the IP addresses in the database in order to detect duplicate IP addresses. Based on this analysis, the user of the LAN test instrument may communicate with the devices having duplicate IP addresses for further diagnosis and correction, as explained in the Abstract.

In framing the rejection with a focus on claim 1, the Examiner points to steps disclosed in Figs. 5A and 5B of Arndt et al and asserts that there is a teaching of the detecting and collecting of addresses as well as the selecting of an IP address which is different from the collected addresses. In particular, the Examiner points to the teaching at col. 7, line 61-col. 8, line 1 for a teaching that the user may select an IP address that would be valid for a local segment. Based upon Applicants' review of that text, Applicants do not find such teaching of an address selection process.

The steps illustrated in Figs. 5A and 5B of Arndt are different from the disclosed and claimed invention. In particular, the claimed technique is for a device to enter a LAN and receive an address, while Arndt is concerned with identifying duplicate IP addresses. Thus, the claimed invention is different and is patentable.

Claims 3, 11, 19 are directed to a method of deciding an internet address of a device to be specified in a network, where the steps include, detecting addresses of all other devices, selecting

an IP address and an MAC address so that the device can "pose as a device having the IP address and the MAC address." This action allows the computer to pretend as if it is the device that is allocated, as explained at page 11, for a device that impersonates other devices on the network. Using the address of the posed device, a transmission is made and addresses are collected of other devices that respond to a destination signal. Finally, an IP address is selected which is different from the collected addresses.

Once again, the purpose in the present invention is to select a particular address for device, while in Arndt, the purpose is to identify duplicate addresses. The method of the present invention is characterized in collecting complete address information by selecting an IP address and a MAC address other than the IP address and the MAC address of the posed device for any device that does not respond, changing the posed device until all the devices are posed, and performing the step of sending the destination signal for each of the posed devices. The method enable a device added on a network to allocate a non-overlapping IP address more precisely.

Applicants respectfully submit that this feature is not taught in Arndt et al.

Claims 6, 12 and 20 also relate to a method of selecting an IP address that does not overlap with other addresses among an effective range permitted as IP addresses, based upon the disclosure with respect to Fig. 6, as taught at pages 13-17, especially the discussion of the use of an "effective range" at pages 15-17. The technique recited in the claims also may be seen as being specific to the method disclosed with regard to the invention as disclosed at pages 20-23 and illustrated in Fig. 12. In sum, particular details of this claim do not appear to be disclosed in Arndt, even though there is a teaching of the use of subnet address ranges that form the basis for a user's selection of an address, at col. 10, lines 50-56 in Arndt. Thus, the claims should be patentable over the teachings of the reference, because of the detail recited in the claims.

Claims 7, 13 and 21 are directed to a method of searching and collecting address already being used in an environment, particularly a network connected by using connecting device such as a switching hub and a router. The method includes selecting an address other than an already posed address, sending a destination signal to any device having an IP address that does not respond by using the IP address of the posed device and collecting addresses of other devices.

This selection is repeated. A fundamental feature of the present invention is that a requesting device impersonate other devices found on the network in order to determine available IP address.

Arndt, in checking on duplicate addresses, does not follow the recited claim language because it does not require a requesting device to impersonate or pose as another device.

Claims 8, 14 and 22 are directed to a method of limiting the address range to be searched in an environment where a wide address base is used. The address space is restricted to a range to be searched by using a net mask. The search is repeated with the use of a net mask of a smaller value.

Arndt mentions the use of a subnet mask at least with regard to step 114 at col. 8, lines 39-46 and col. 10, lines 50-56. However, Arndt does not teach the second step of these claims. The method of the present invention is characterized in repeating a search of address range with use of the net mask of smaller value (than the predetermined value) if all matters to be searched are detected. The step enable a device to search a non-overlapping address more efficiently.

Finally, claims 9, 15 and 23 are directed to a method for automatically deciding a value of an Internet address that is not overlapped. This group of claims is directed to the identification of duplicate addresses, but is focused on the selection of a particular internet address that is non-overlapping. The claims, however, specifically concern the specific steps of judging whether a MAC address included in a packet is smaller than its own MAC address, with the consequence that the IP address is selected as its own IP address if smaller but is not selected if larger. Nothing in Arndt appears to teach this feature. Thus, Applicants respectfully submit that these claims are patentable.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 CFR 1.111
U.S. Application No. 09/887,139

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.
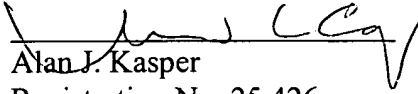
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